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PDD P94100412(EP)USCDIX1C1D1

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/770,157	01/26/2001	Adrian P. Wise	100412(EP)USCDIX1C1D1	8565 PDD

22887 7590 06/30/2003

DISCOVISION ASSOCIATES  
INTELLECTUAL PROPERTY DEVELOPMENT  
2355 MAIN STREET, SUITE 200  
IRVINE, CA 92614

EXAMINER

NGUYEN, DUSTIN

ART UNIT

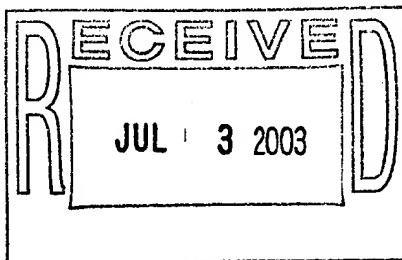
PAPER NUMBER

2154

DATE MAILED: 06/30/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.



DOCKETING  
RECEIVED DATE: 7/3/03  
INITIALS: RS/BN  
DUE DATE: 9/30/03  
FINAL DEADLINE: 12/30/03

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PDD  
Rev. 04/03

Incoming: 7/3/03 Date Initials

Outgoing: \_\_\_\_\_ Date Initials

Calleen  Steve W.  \_\_\_\_\_  
 Kenny  File  \_\_\_\_\_  
 Richard S.  Docketing  
Comments: O.A.

Office Action Summary	Application No.	Applicant(s)
	09/770,157	WISE ET AL.
Examiner	Art Unit	
Dustin Nguyen	2154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

## Disposition of Claims

4)  Claim(s) 1-29 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-29 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

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## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)  The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All b)  Some \* c)  None of:

1.  Certified copies of the priority documents have been received.
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a)  The translation of the foreign language provisional application has been received.

15)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.  
4)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_.  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_.

**DETAILED ACTION**

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1. Claims 1-29 are presented for consideration.

***Oath/Declaration***

2. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It is claiming the domestic priority of application 08/382952 which is not the same application as mentioned in the disclosure as 08/382958 ( Amendment filed on 01/06/2001 ).

***Specification***

3. Examiner requests Applicants to update the status of any related applications as mentioned in the specification [ paragraph 1, and amended in amendment filed on 01/06/2001 ].
4. Examiner requests Applicants to point out where in the specification that provides detail support for the claim invention since the specification content is largely described.
5. The abstract of the disclosure is objected to because the abstract is the same for other copending applications and also missing period at the end of the abstract. Correction is required. See MPEP § 608.01(b).

6. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

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7. The disclosure is objected to because of the following informalities:

I. Page number errors:

a. pages 16a-16l, pages 24a, 24b

II. Specification errors:

a. Figures 3a(1), 3a(2) - page 17

b. bad typing - pages 36-50

III. Table error:

a. bad typing - table A.11, A.14, A.17.

Appropriate correction is required.

#### ***Information Disclosure Statement***

8. Examiner requests Applicants to resubmit Foreign Patent or Published Foreign Patent Application and Other Documents as mentioned in the IDS filed on 01/26/2001 to be considered.

#### ***Double Patenting***

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686

F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 1-29 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-31 of patent No. 5978592 [hereinafter '592 patent]. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons:

As per claims 1-13 of the instant application, the '592 patent contains the subject matter claimed in the instant application. Both are claiming common subject matter, as follows:

An apparatus for decompressing video data, comprising:

a start code detector ...; and

a pipeline having stages ....

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The claims of '592 patent does not specifically have a method step in the same order as described in the claims 1-13 of instant application but it would have been obvious to a person skill in the art to recognize that the two claims are similar because doing so would enable the system to decode different standards as set forth in '592 patent.

As per claims 14-29 of the instant application, they contain similar subject matter as claims 13-31 of '592 patent. Accordingly, they are provisionally rejected under the judicially created doctrine of obviousness-type double patenting.

***Claim Rejections - 35 USC § 112***

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The following terms lack antecedent basis:

I.	the data tokens	-	claim 1
II.	the format	-	claim 2
III.	the consecutive stages	-	claim 7.

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***Claim Rejections - 35 USC § 102***

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

15. Claims 1-5, 7, 8, 10, 12-15, 17-20, 22-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Gonzales et al. [ US Patent No 5289577 ].

16. As per claim 1, Gonzales discloses the invention as claimed including an apparatus for decompressing video data, comprising:

a start code detector to convert a portion of a stream of video data into a stream of data tokens in response to detecting a start code sequence in said stream of video data [ Figure 3A; col 8, lines 47-67; and col 10, lines 61-col 11, lines 5 ]; and

a pipeline having stages [ 12, Figure 1 ] and being capable of decoding video data [ col 2, lines 61-65 ], the start code detector being coupled to send the data tokens to the pipeline [ col 6, lines 52-67 ].

17. As per claim 2, Gonzales discloses a plurality of the stages of said pipeline have operating modes responsive to the format of said tokens [ col 13, lines 1-26 ].

18. As per claim 3, Gonzales discloses an inserter of search mode tokens to transmit search mode tokens into the stream of video data [ col 11, lines 25-41 ].

19. As per claim 4, Gonzales discloses the start code detector is capable of searching for video start codes complying with different formats [ col 9, lines 40-col 10, lines 11 ].

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20. As per claim 5, Gonzales discloses formats complying with at least two of the video standards selected from the group consisting of JPEG [ col 7, lines 26-36 ], MPEG [ col 13, lines 34-49 ], and H.261.
21. As per claim 7, Gonzales discloses two-wire interfaces coupling the consecutive stages of the pipeline [ 16a, 16b, Figure 1 ].
22. As per claim 8, Gonzales discloses the two-wire interfaces transmit data valid and data acceptance signals [ col 5, lines 5-50 ].
23. As per claim 10, Gonzales discloses a portion of the stages of the pipeline reconfigure themselves to process data in response to receiving predetermined types of tokens [ col 13, lines 4-15 ].
24. As per claim 12, Gonzales discloses the start code detector is a hardware device [ col 9, lines 55-59 ].
25. As per claim 13, Gonzales discloses  
a Huffman decoder coupled to receive data from the start code detector [ col 7, lines 45-55 ];  
a token formatter coupled to data from the Huffman decoder [ col 7, lines 37-45 ];  
an inverse modeler coupled to receive data from the token formatter [ Figure 5 ]; and

an inverse quantizer coupled to receive data from the inverse modeler [ Figure 5 ].

26. As per claim 14, it is method claimed of claims 11-4, it is rejected for similar reasons as stated in claims 1-4.

27. As per claim 15, Gonzales discloses

making a random access into the data stream to receive the portion of the video stream [ col 12, lines 14-16 ]; and

wherein the search mode token is inserted in response to making the random access [ col 12, lines 17-35 ].

28. As per claim 17, it is method claimed of claim 10, it is rejected for similar reason as stated above in claim 10.

29. As per claim 18, it is method claimed of claim 5, it is rejected for similar reason as stated above in claim 5.

30. As per claim 19, 20, 22 and 23, they are rejected for similar reasons as stated above in claims 14, 15, 17 and 18 respectively.

31. As per claim 24, Gonzales discloses a semiconductor substrate, the pipeline, means for inserting and start code detector being located on the substrate [ memory ] [ Abstract ].



32. As per claims 25-29, they are rejected for similar reasons as stated above in claims 1-5 and 12.

***Claim Rejections - 35 USC § 103***

33. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

34. Claims 6, 9, 11, 16 and 21, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gonzales et al. [ US Patent No 5289577 ], in view of Normile et al. [ US Patent No 5461679 ].

35. As per claim 6, Gonzales does not specifically disclose the start code detector ignores video data until a video start code is found in response to receiving one of the search mode tokens. Normile discloses the start code detector ignores video data until a video start code is found in response to receiving one of the search mode tokens [ col 13, lines 47-col 14, lines 9; and col 16, lines 29-32 ]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Gonzales and Normile because Normile's teaching of start code detector would provide a method to allow compressed moving video images to be decompressed and displayed in real time [ Normile, col 7, lines 35-37 ].

36. As per claim 9, Normile discloses the start code detector is adapted to introduce new tokens into the stream of video data at detected start code sequences [ col 13, lines 47-col 14, lines 9; and col. 16, lines 26-29 ].

37. As per claim 11, Normile discloses the start code detector introduces picture end tokens into the stream of video data [ col 8, lines 4-24 ].

38. As per claims 16 and 21, Gonzales does not specifically disclose the random access results from one of an error and a channel switch. Normile discloses the random access results from one of an error and a channel switch [ col 13, lines 27-47 ]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Gonzales and Normile because Normile's teaching of random access would provide data integrity in communication network.

39. A shortened statutory period for response to this action is set to expire **3 (three) months and 0 (zero) days** from the mail date of this letter. Failure to respond within the period for response will result in **ABANDONMENT** of the application (see 35 U.S.C 133, M.P.E.P 710.02, 710.02(b)).

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dustin Nguyen whose telephone number is (703) 305-5321. The examiner can normally be reached on Monday – Friday (8:00 – 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703) 305-9678.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directly to the receptionist whose telephone number is (703) 305-3900.

Dustin Nguyen

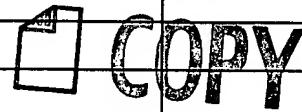
  
ZARNI MAUNG  
PRIMARY EXAMINER

**Notice of References Cited**Application/Control No.  
09/770,157Applicant(s)/Patent Under  
Reexamination  
WISE ET AL.Examiner  
Dustin NguyenArt Unit  
2154

Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-5289577	02-1994	Gonzales et al.	345/506
	B	US-5461679	10-1995	Normile et al.	382/304
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			


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**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Form PTO-1449  
(modified)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
941004(EPI)USC1X

SERIAL NO.

400297 09/307289

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(Use several sheets if necessary)

APPLICANT  
ADRIAN P. WISE ET ALFILING DATE  
MARCH 7, 1995GROUP  
2302

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## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
UNSH	AA	3875391	04/01/75	SHAPIRO ET AL	235	156	11/02/73
JH	AB	4225920	09/30/80	STOKES	364	200	09/11/78
JH	AC	4228497	10/14/80	GUPTA ET AL	364	200	11/17/77
JH	AD	4307447	12/22/81	PROVANZANO ET AL	364	200	06/19/79
JH	AE	4467409	08/21/84	POTASH ET AL	364	200	08/05/80
JH	AF	4617657	10/14/86	DRYNAN ET AL	370	60	12/31/84
JH	AG	4710866	12/01/87	ZOLNOWSKY ET AL	364	200	10/07/86
JH	AH	4809159	02/28/89	SOWA	364	200	01/21/88
JH	AI	4811214	03/07/89	NOSENCHUCK ET AL	364	200	11/14/86
JH	AJ	4811413	03/07/89	KIMMEL	382	41	10/22/87
JH	AK	4841436	06/20/89	ASANO ET AL	364	200	05/30/86
JH	AL	4855947	08/08/89	ZMINSKI ET AL	364	200	05/27/87
JH	AM	4922418	05/01/90	DOLECEK	364	200	01/15/88
JH	AN	4953082	08/28/90	NOMURA ET AL	364	200	02/15/89
JH	AO	4989138	01/29/91	RADOCHONSKI	364	200	05/14/90
JH	AP	5043880	08/27/91	YOSHIDA	364	200	01/23/89
JH	AQ	5184347	02/02/93	Farwell et al.	370	94.1	07/09/91
JH	AR	5203003	04/13/93	DONNER	395	800	03/28/91
JH	AS	5218436	06/08/93	SUGIYAMA ET AL	358	141	01/23/91
JH	AT	5227863	07/13/93	Bilbrey et al.	348	578	08/07/90
JH	AU	5297263	03/22/94	OHTSUKA ET AL	395	375	04/17/92
UNSH	AV	5301344	04/05/94	KOLCHINSKY	395	800	01/29/91

EXAMINER *John H. Hargan* 05/08/03

DATE CONSIDERED

5/27/97

EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449  
(Modified)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.  
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400387

09/307239

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

(Use several sheets if necessary)

APPLICANT  
ADRIAN P. WISE ET ALFILING DATE  
MARCH 7, 1995GROUP  
2202

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FEB (37 CP) 1.98(b))

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1997
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DEPARTMENT INITIAL	PATENT NUMBER	ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
DN JH	5309563	05/03/94	FARRAND ET AL	395	200	09/09/91
JH	5329313	07/12/94	KEITH	348	422	10/01/93
JH	5329619	07/12/94	PAGE ET AL	395	200	10/30/92
JH	5333212	07/26/94	LIGTENBERG	382	56	11/17/92
JH	5333266	07/26/94	BOAZ ET AL	395	200	03/27/92
JH	5341371	08/23/94	SIMPSON	370	85.4	05/24/91
JH	5406279	04/11/95	ANDERSON ET AL	341	51	09/02/92
JH	5414813	05/09/95	SHIOBARA	395	200	11/01/93
JH	5442790	08/15/95	NOSENCHUCK	395	700	03/09/94
JH	5446866	08/29/95	DRAKO ET AL	395	500	01/30/92
JH	5450599	09/12/95	HORVATH ET AL	395	800	06/04/92
JH	5452006	09/19/95	AULD	348	390	10/25/93
JH	5461679	10/24/95	NORMILE ET AL	395	650	05/14/93
JH	5481689	01/02/96	STAMM ET AL	395	412	08/13/93
JH	5487064	01/23/96	GALAND ET AL	370	60	05/31/94
JH	5490247	02/06/96	TUNG ET AL	395	162	11/24/93
JH	5497498	03/05/96	TAYLOR	395	800	09/28/93
JH	5504869	04/02/96	UCHIDA	395	375	07/15/94
JH	5535290	07/09/96	Allen	382	250	09/11/95
JH	5566089	10/15/96	HOOGENBOOM	364	514A	10/26/94
DN JH	5579052	11/26/96	Artieri	348	416	05/24/94

EXAMINER

Dustin Nguyen  
05/08/93

DATE CONSIDERED

5/27/97

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09/307239

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

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1997 CFR 1.98(b))FILING DATE  
MARCH 7, 1995GROUP  
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## FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

EXAMINER INITIAL	DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION YES   NO
JH	0618728	05.10.94	EP			
JH	0425935	11/10/94	WO	G06K	15/00	NO

## OTHER DOCUMENTS (Including Author, Title, Date\*\*, Relevant Pages, Place of Publication\*\*\*)

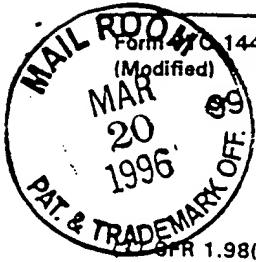
EXAMINER INITIAL	DOCUMENT IDENTIFICATION
JH	P01 ELLIOTT J A ET AL: "REAL-TIME SIMULATION OF VIDEOPHONE IMAGE CODING ALGORITHMS ON RECONFIGURABLE MULTICOMPUTERS." IEE PROCEEDINGS E. COMPUTERS & DIGITAL TECHNIQUES, VOL. 139, NO. 3 PART E., 05/01/92, PP 269-279, XP0000306411.
JH	P02 HONG, YANG-CHANG; T.H. PAYNE. A HYBRID APPROACH FOR EFFICIENT DATAFLOW COMPUTING. COMPUTERS AND COMMUNICATIONS, 1990 INT'L PHOENIX CONFERENCE. IEEE PUBLICATIONS, MAY 1990, PP 170-178.
JH	P03 KAORU, UCHIDA ET AL: "A PIPELINED DATAFLOW PROCESSOR ARCHITECTURE BASED ON A VARIABLE LENGTH TOKEN CONCEPT." ARCHITECTURE. UNIVERSITY PARK, AUG. 15 - 19, 1988, VOL. 1, 16 AUGUST 1988, BRIGGS E A, PP 209-216, XP000079309.
JH	P04 KOPET, TOM: "PROGRAMMABLE ARCHITECTURES FOR REAL-TIME VIDEO COMPRESSION." 4TH INTERNATIONAL CONFERENCE ON SIGNAL PROCESSING APPLICATIONS & TECHNOLOGY, VOL. 2, 09/28/93 - 10/01/93, SANTA CLARA, CALIFORNIA, USA, PP 1031-1038.
JH	P05 MAYER, A.C.: "THE ARCHITECTURE OF A SINGLE-CHIP PROCESSOR ARRAY FOR VIDEOCOMPRESSION." PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON CONSUMER ELECTRONICS, ROSEMONT, JUNE 8-10, 1993, NO. CONF. 12, 08/06/93, INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, PP 294-95, XP0000427624.
JH	P06 NORMILE, JAMES. DAN WRIGHT, IMAGE COMPRESSION USING COARSE-GRAIN PARALLEL PROCESSING. ICASSP 1991: ACOUSTICS, SPEECH & SIGNAL PROCESSING CONFERENCE, IEEE PUBLICATIONS, JULY 1991, PP 1121-1124.
JH	P07 TOKUMICHI MURAKAMI ET AL: "A DSP ARCHITECTURAL DESIGN FOR LOW BIT-RATE MOTION VIDEO CODECS." IEEE TRANSACTIONS ON CIRCUITS AND SYSTEMS, VOL. 36, NO. 10, 10/1/89, PP 1267-1274, XP000085313.
JH	P09 YANG, KUN-MIN. VLSI ARCHITECTURE DESIGN OF A VERSATILE VARIABLE LENGTH DECODING CHIP FOR REAL TIME VIDEO CODECS. TENCON'90 IEEE REGION 10 CONFERENCE ON COMPUTER AND COMMUNICATIONS, IEEE PUBLICATIONS FEBRUARY 1990, PP 551-554.

EXAMINER

DATE CONSIDERED

6/6/97

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U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. P000 P941004(EP)USC1CIP	SERIAL NO. 08-0000397 09/30/22 39
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		APPLICANT Wise et al.	
		FILING DATE 03/07/95	GROUP 2317 2302 2783

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER						ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
DNJH	AA	3	8	9	3	0	4	2	7/1/75	Whitman et al.	331	55	12/12/73
previously filed	AB	3	9	6	2	6	8	5	6/8/76	Belle Isle	340	172-5	6/3/74
DNJH	AC	4	1	0	7	7	8	0	8/15/78	Grimsdale et al.	364	521	1/25/77
DNJH	AD	4	1	4	2	2	0	5	2/27/79	Iinuma	358	13	7/19/77

## FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

		DOCUMENT NUMBER		COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
		AF 0 1 9 6 9 1 1	08.10.86	EP				
		AF 0 2 5 5 7 6 7	10.02.88	EP				
		AF 0 4 6 8 4 8 0	29.01.92	EP				

## OTHER DOCUMENTS (Including Author, Title, Date\*\*, Relevant Pages, Place of Publication\*\*\*)

previously cited	AH	Chong, "A Data Flow Architecture For Digital Image Processing," Wescon Tech. Papers No. 4/6, 10/30/84, Anaheim, California, USA, pp. 1-10
	AI	P. Yip, et al., "DIT and DIF Algorithm for Discrete Sine and Cosine Transforms" Proceedings of the International Symposium on Circuits and Systems, IEEE Press, New York, US, Vol. 2/3, 5 June 1985, Kyoto, JP, pages 941-944
	AJ	Hsieh S. Hou, "A Fast Recursive Algorithm for Computing the Discrete Cosine Transform," IEEE Transactions on Acoustics, Speech, and Signal Processing, Vol. 35, No. 10, October 1987, IEEE Press, New York, US, pages 1455-1461
previously cited	AK	Komori et al., "An Elastic Pipeline Mechanism By Self-Timed Circuits," IEEE Journal Of Solid-State Circuits, Vol. 23, No. 1, 2/88, New York, NY, USA, pp. 111-117
	AL	A. Gupta et al., "A Fast Recursive Algorithm for the Discrete Sine Transform," IEEE Transactions on Acoustics, Speech, and Signal Processing, Vol. 38, No. 3, March 1990, IEEE Press, New York, US, pages 553-557
	AM	H.R. Wu, et al., "A Two Dimensional Fast Cosine Transform Algorithm Based on Hou's Approach," IEEE Transaction on Acoustics, Speech, and Signal Processing, Vol. 39, No. 2, February 1991, IEEE Press, New York, US, pages 544-546

EXAMINER *John H. Hayes* 65/08/02 DATE CONSIDERED  
*John H. Hayes* 11/21/96

EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-1449 (Modified)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. P00D P941004(EPIUSC1CIP)	SERIAL NO. 09/307235
INFORMATION DISCLOSURE STATEMENT BY APPLICANT  (Use several sheets if necessary)		APPLICANT Wise et al.	
(37 CFR 1.98(b))		FILING DATE 03/07/95	GROUP 2783 2311 2308

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER							ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
previously filed	AN	4	+	4	9	2	4	2	4/10/79	Pirz	364	200	5/6/77
DANH	AO	4	1	9	6	4	4	8	4/1/80	Whitehouse et al.	358	135	5/15/78
JH	AP	4	2	1	5	3	6	9	7/29/80	Iijima	358	146	12/15/78
JH	AQ	4	3	0	2	7	7	5	11/24/81	Widergren et al.	358	136	12/15/78
JH	AR	4	3	3	4	2	4	6	6/8/82	Saran	358	261	5/16/80
JH	AS	4	4	3	3	3	0	8	2/21/84	Hirata	331	17	12/3/81
JH	AT	4	4	3	7	0	7	2	3/13/84	Asami	331	1A	9/21/82
JH	AU	4	4	9	5	6	2	9	1/22/85	Zasio et al.	377	70	1/25/83
DANH	AV	4	5	4	0	9	0	3	9/10/85	Cooke et al.	307	465	10/17/83

## FOREIGN PATENTS OR PUBLISHED FOREIGN PATENT APPLICATIONS

		DOCUMENT NUMBER							PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION		
													YES	NO	
JH	AW	0	5	7	2	2	6	2	01.12.93	EP					
JH	AX	0	5	7	2	3	6	3	01.12.93	EP					
JH	AY	0	5	7	6	7	4	9	05.01.84	EP					
JH	AZ	0	5	8	9	7	3	4	30.03.84	EP					X
JH	BA	0	6	3	9	0	3	2	15.02.86	EP					
JH	BB	2	0	4	6	0	3	5	22.10.80	GB					
JH	BC	2	0	5	9	7	2	4	23.04.81	GB					
JH	BD	2	1	7	1	5	7	8	28.08.86	GB					
JH	BE	2	1	9	4	0	8	5	24.02.88	GB					

## OTHER DOCUMENTS (Including Author, Title, Date\*\*, Relevant Pages, Place of Publication\*\*\*)

BF	
BG	
BH	
EXAMINER	<i>Dushnayguer</i> 05/08/03
	<i>John Smith</i>
	DATE CONSIDERED: 11/21/96

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SERIAL NO.

08/400,907 09/307,239

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

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(37 CFR 1.98(b))

APPLICANT  
Wise et al.FILING DATE  
03/07/95GROUP  
2317 2202 2783

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER						ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
DN/JH	BI	4	5	8	0	0	6	6	4/1/86	Berndt	307	276	3/22/84
JH	BJ	4	6	3	0	1	9	8	12/16/86	I Yuan	364	200	2/21/84
JH	BK	4	6	4	6	1	5	1	2/24/87	Welles II et al.	358	149	2/1/85
JH	BL	4	6	7	9	1	6	3	7/7/87	Arnould et al.	364	725	3/8/85
JH	BM	4	7	4	7	0	7	0	5/24/88	Trottier et al.	364	900	1/9/84
DN/JH	BN	4	7	8	5	3	4	9	11/15/88	Keith et al.	358	136	10/5/87
previously filed	BO	4	7	8	9	9	2	7	12/6/88	Hannah	364	200	4/7/86
DN/JH	BP	4	7	9	9	6	7	7	1/24/89	Frederiksen	273	1E	2/24/86
previously filed	BQ	4	8	2	3	2	0	+	4/18/89	Simon et al.	358	133	11/16/87
DN/JH	BR	4	8	2	9	4	6	5	5/9/89	Knauer et al.	364	725	6/19/86
DN/JH	BS	4	8	3	1	4	4	0	5/16/89	Borgers et al.	358	133	3/24/88
DN/JH	BT	4	8	6	6	5	1	0	9/12/89	Goodfellow et al.	358	13	9/30/88
previously filed	BU	4	8	6	6	6	3	7	9/12/89	Gonzales Lopez et al.	364	518	10/30/87
DN/JH	BV	4	8	8	7	2	2	4	12/12/89	Okano et al.	364	518	8/24/87

## FOREIGN PATENTS OR PUBLISHED FOREIGN PATENT APPLICATIONS

		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION	
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JH	BW	2 2 6 8 0 3 5	22.12.93	GB				
JH	BX	2 2 6 9 0 7 0	26.01.94	GB				
	BY							
	BZ							

## OTHER DOCUMENTS (Including Author, Title, Date\*\*, Relevant Pages, Place of Publication\*\*\*)

CA		
CB		
CC		
EXAMINER	Dushnay 05/08/03 John H. Hickey	DATE CONSIDERED 11/21/96

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PO00 P941004(EPIUSC1CIP)SERIAL NO.  
007409-297INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

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(37 CFR 1.98(b))

APPLICANT  
Wise et al.FILING DATE  
03/07/95GROUP  
2317 2302 2783

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	PATENT NUMBER								ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
DN JH	CD	4	8	9	1	7	8	4	1/2/90	Kato et al.	364	900	1/8/88
JH	CE	4	9	0	3	6	1	8	2/20/90	Wiebach et al.	341	51	7/16/86
JH	CF	4	9	1	2	6	6	8	3/27/90	Aubie et al.	364	725	6/5/87
JH	CG	4	9	2	2	3	4	1	5/1/90	Strobach	358	136	9/26/88
JH	CH	4	9	2	4	2	9	8	5/8/90	Kitamura	358	12	9/15/88
JH	CI	4	9	2	4	3	0	8	5/8/90	Feuchtwanger	358	133	3/7/89
JH	CJ	4	9	7	5	5	9	5	12/4/90	Roberts et al.	307	272.2	7/20/88
JH	CK	4	9	9	1	1	1	2	2/5/91	Callermyn	364	518	12/21/88
JH	CL	5	0	0	3	2	0	4	3/26/91	Cushing et al.	307	465	12/19/89
JH	CM	5	0	2	7	2	1	2	6/25/91	Marlton et al.	358	183	12/6/89
JH	CN	5	0	3	8	2	0	9	8/6/91	Hang	358	136	8/6/91
JH	CO	5	0	5	3	9	8	5	10/1/91	Friedlander et al.	364	725	10/19/89
JH	CP	5	0	5	7	7	9	3	10/15/91	Cowley et al.	331	1A	10/29/90
JH	CQ	5	0	6	0	2	4	2	10/22/91	Arbeiter	375	122	2/24/89
JH	CR	5	0	8	1	4	5	0	1/14/92	Lucas et al.	340	728	3/9/90
DN JH	CS	5	0	8	6	4	8	9	2/4/92	Shimura	382	56	7/3/91

## FOREIGN PATENTS OR PUBLISHED FOREIGN PATENT APPLICATIONS

		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	CT							
	CU							
	CV							

## OTHER DOCUMENTS (Including Author, Title, Date\*\*, Relevant Pages, Place of Publication\*\*\*)

CW	
CX	
CY	

EXAMINER *Dushnay* 05/08/03  
*John Dushnay*

DATE CONSIDERED

11/21/96

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT		APPLICANT Wise et al.	
(Use several sheets if necessary)		FILING DATE 03/07/95	GROUP 201 8202 2783
(37 CFR 1.98(b))			

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER							ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
DN JH	CZ	5	0	9	1	7	2	1	2/25/92	Hamori	340	727	12/22/88
JH	DA	5	1	0	7	3	4	5	4/21/92	Lee	358	432	5/28/91
JH	DB	5	1	1	1	2	9	2	5/5/92	Kuriacose et al.	358	133	2/27/91
JH	DC	5	1	1	3	2	5	5	5/12/92	Nagata et al.	358	136	5/11/90
JH	DD	5	1	2	2	8	7	3	6/16/92	Golin	358	133	2/19/91
JH	DE	5	1	2	2	8	7	5	6/16/92	Raychaudhuri et al.	358	133	2/27/91
JH	DF	5	1	2	4	7	9	0	6/23/92	Nakayama	358	133	2/20/90
DN JH	DG	5	1	2	6	8	4	2	6/30/92	Andrews et al.	358	133	12/26/90
previously filed	DH	5	+	2	9	0	5	9	7/7/92	Hannah	395	166	1/23/91
DN JH	DI	5	1	3	0	5	6	8	7/14/92	Miller et al.	307	272.2	11/5/90
JH	DJ	5	1	3	4	4	8	7	7/28/92	Taguchi et al.	358	209	11/5/90
JH	DK	5	1	3	4	6	9	7	7/28/92	Scheffler	395	425	12/10/90
JH	DL	5	1	3	6	3	7	1	8/4/92	Savatier et al.	358	133	3/15/90
JH	DM	5	1	4	2	3	8	0	8/25/92	Sakagami et al.	358	432	10/18/90
JH	DN	5	1	4	6	3	2	5	9/8/92	Ng	358	135	4/29/91
DN JH	DO	5	1	4	6	3	2	6	9/8/92	Hasegawa	358	135	11/13/90

## FOREIGN PATENTS OR PUBLISHED FOREIGN PATENT APPLICATIONS

		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	DP							
	DQ							
	DR							

## OTHER DOCUMENTS (Including Author, Title, Date\*\*, Relevant Pages, Place of Publication\*\*\*)

DS	
DT	
DU	
EXAMINER	Justin Guyer John Naujok
	05/08/03
	DATE CONSIDERED 11/21/96

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PDDO P941004(EPIUSC1CIP)

SERIAL NO.

0814000337

09/307239

INFORMATION DISCLOSURE  
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(37 CFR 1.98(b))

APPLICANT  
Wise et al.FILING DATE  
03/07/95GROUP  
2317 2288 2283

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER							ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
DY JK	DV	5	1	4	8	2	7	1	9/15/92	Kato et al.	358	133	4/17/91
JH	DW	5	1	4	8	5	2	4	9/15/92	Harlin et al.	395	166	11/29/88
JH	DX	5	1	5	1	8	7	5	9/29/92	Sato	364	784	10/2/91
JH	DY	5	1	5	9	4	4	9	10/27/92	Allmendinger	358	136	12/26/91
JH	DZ	5	1	6	4	8	1	9	11/17/92	Music	358	13	4/3/91
JH	EA	5	1	6	8	3	5	6	12/1/92	Acampora et al.	358	133	12/20/91
JH	EB	5	1	6	8	3	7	5	12/1/92	Reisch et al.	358	432	9/18/91
JH	EC	5	1	7	2	0	1	1	12/15/92	Leuthold et al.	307	272.2	6/30/89
JH	ED	5	1	7	5	6	1	7	12/29/92	Wallace et al.	358	133	12/4/91
JH	EE	5	1	7	9	3	7	2	1/12/93	West et al.	340	799	3/28/91
JH	EF	5	1	8	2	6	4	2	1/26/93	Gersdorff et al.	358	133	4/19/91
JH	EG	5	1	8	4	1	2	4	2/2/93	Molpus et al.	341	50	1/2/91
JH	EH	5	1	8	5	8	1	9	2/9/93	Ng et al.	382	56	4/29/91
JH	EI	5	1	8	9	5	2	6	2/23/93	Sasson	358	432	9/21/90
JH	EJ	5	1	9	1	5	4	8	3/2/93	Balkanski et al.	364	725	1/3/92
JH	EK	5	1	9	3	0	0	2	3/9/93	Guichard et al.	358	133	3/25/91
JH JK	EL	5	2	0	1	0	5	6	4/6/93	Daniel et al.	395	800	5/2/90

## FOREIGN PATENTS OR PUBLISHED FOREIGN PATENT APPLICATIONS

		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	EM							
	EN							
	EO							

## OTHER DOCUMENTS (Including Author, Title, Date\*\*, Relevant Pages, Place of Publication\*\*\*)

EP	
EQ	
EXAMINER	Disha Nagyayev 05/08/03 Omar Daoudi
	DATE CONSIDERED 11/31/96

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Form PTO-1449 (Modified)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE							ATTY. DOCKET NO. 10007941004 (EPUSC1CIP)	SERIAL NO. 08/100000
INFORMATION DISCLOSURE STATEMENT BY APPLICANT								APPLICANT Wise et al.	
(Use several sheets if necessary)								FILING DATE 03/07/95	GROUP 2342 2283 2783
(37 CFR 1.98(b))									

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## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER							ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
DN JT	ER	5	2	0	2	8	4	7	4/13/93	Bolton et al.	364	725	7/31/90
JT	ES	5	2	1	2	5	4	9	5/18/93	Ng et al.	358	135	6/16/92
JT	ET	5	2	1	2	7	4	2	5/18/93	Normile et al.	382	56	5/24/91
JT	EU	5	2	1	4	5	0	7	5/25/93	Aravind et al.	358	133	11/8/91
JT	EV	5	2	1	6	7	2	4	6/1/93	Suzuki et al.	382	7	8/28/92
JT	EW	5	2	2	3	9	2	6	6/29/93	Stone et al.	358	133	12/19/91
JT	EX	5	2	2	7	8	7	8	7/13/93	Puri et al.	358	136	11/15/91
JT	EY	5	2	2	8	0	9	8	7/13/93	Crinon et al.	382	56	6/14/91
JT	EZ	5	2	2	9	8	6	3	7/20/93	Kao et al.	358	426	12/24/90
JT	FA	5	2	3	1	4	8	4	7/27/93	Gonzales et al.	358	133	11/8/91
JT	FB	5	2	3	1	4	8	6	7/27/93	Acampora et al.	358	133	7/27/92
JT	FC	5	2	3	3	4	2	0	8/3/93	Piri et al.	358	149	4/10/85
JT	FD	5	2	3	3	6	9	0	8/3/93	Sherlock et al.	395	165	7/28/89
JT	FE	5	2	3	7	4	1	3	8/17/93	Israelsen et al.	358	160	11/19/91
JT	FF	5	2	4	1	2	2	2	8/31/93	Small et al.	307	449	12/20/91
DN JT	FG	5	2	4	1	3	8	3	8/31/93	Chen et al.	358	136	5/13/92

## FOREIGN PATENTS OR PUBLISHED FOREIGN PATENT APPLICATIONS

		DOCUMENT NUMBER				PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION	
		YES	NO								
	FH										
	FI										
	FJ										

## OTHER DOCUMENTS (Including Author, Title, Date\*\*, Relevant Pages, Place of Publication\*\*\*)

FK	
FL	
FM	

EXAMINER *Dustin Nguyen* 03/08/03

DATE CONSIDERED

11/21/96

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT		APPLICANT Wise et al.	
(Use several sheets if necessary)		FILING DATE 03/07/95	GROUP 2011-2202 2783
(37 CFR 1.98(b))			

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL		PATENT NUMBER							ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
DA	JH	FN	5	2	4	1	6	5	8	8/31/93	Masterson et al.	395	162	8/21/90
	JH	FO	5	2	4	7	6	1	2	9/21/93	Quinard	395	166	6/29/90
	JH	FP	5	2	4	9	1	4	6	9/28/93	Uramoto et al.	364	725	3/20/92
	JH	FQ	5	2	5	3	0	5	8	10/12/93	Gharavi	358	136	4/1/92
	JH	FR	5	2	5	3	0	7	8	10/12/93	Balkanski et al.	358	426	8/23/90
	JH	FS	5	2	5	7	2	1	3	10/26/93	Kim et al.	364	725	5/30/91
	JH	FT	5	2	5	7	2	2	3	10/26/93	Dervisoglu	365	154	11/13/91
	JH	FU	5	2	5	7	3	5	0	10/26/93	Howard et al.	395	162	12/13/91
	JH	FV	5	2	5	8	7	2	5	11/2/93	Kinoshita	331	17	10/4/91
	JH	FW	5	2	6	0	7	8	1	11/9/93	Soloff et al.	358	133	5/20/92
	JH	FX	5	2	6	0	7	8	2	11/9/93	Hui	358	133	8/31/92
	JH	FY	5	2	6	1	0	4	7	11/9/93	Rivshin	395	163	10/29/91
	JH	FZ	5	2	6	3	1	3	6	11/16/93	DeAguiar et al.	395	164	4/30/91
	JH	GA	5	2	6	7	3	3	4	11/30/93	Normille et al.	382	56	1/21/93
	JH	GB	5	2	7	6	5	1	3	1/4/94	van der Wal et al.	358	136	6/10/92
DA	JH	GC	5	2	7	6	6	8	1	1/4/94	Tobagi et al.	370	85.4	6/25/92

## FOREIGN PATENTS OR PUBLISHED FOREIGN PATENT APPLICATIONS

		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	GD							
	GE							
	GF							

## OTHER DOCUMENTS (Including Author, Title, Date\*\*, Relevant Pages, Place of Publication\*\*\*)

GG		
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EXAMINER	<i>John Dury</i>	05/09/03
	<i>John Dury</i>	
		DATE CONSIDERED
		11/21/96

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Form PTO-1449 (Modified)	U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE	ATTY. DOCKET NO. P000 P941004(EPIUSC1CIP)	SERIAL NO. 09/307 239
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)		APPLICANT Wise et al.	
(37 CFR 1.98(b))		FILING DATE 03/07/95	GROUP 2211 2303 2783

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EXAMINER INITIAL		PATENT NUMBER								ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
DN JH	GJ	5	2	7	6	7	8	4		1/4/94	Ohki	395	127	12/17/91
JH	GK	5	2	7	8	5	2	0		1/11/94	Parker et al.	331	1A	10/26/92
JH	GL	5	2	7	8	6	4	6		1/11/94	Civanlar et al.	358	133	3/17/93
JH	GM	5	2	7	8	6	4	7		1/11/94	Hingorani et al.	358	136	8/5/92
JH	GN	5	2	8	3	6	4	6		2/1/94	Bruder	348	415	4/9/92
JH	GO	5	2	8	7	1	7	8		2/15/94	Acampora et al.	348	384	7/6/92
JH	GP	5	2	8	7	1	9	3		2/15/94	Lin	358	261.1	6/14/91
DN JH	GQ	5	2	8	7	4	2	0		2/15/94	Barrett	382	56	4/8/92
previously filed	GR	5	2	8	9	2	7	6		2/22/94	Sircusca et al.	348	467	6/19/92
previously filed	GS	5	2	8	9	5	7	7		2/22/94	Gonzales et al.	395	463	6/4/92
DN JH	GT	5	2	9	3	2	2	9		3/8/94	Iu	348	415	3/27/92
JH	GU	5	2	9	4	8	9	4		3/15/94	Gebara	331	1A	10/2/92
JH	GV	5	2	9	8	8	9	6		3/29/94	Lei et al.	341	51	3/15/93
JH	GW	5	2	9	8	9	9	2		3/29/94	Pietras et al.	348	415	10/8/92
JH	GX	5	2	9	9	0	2	5		3/29/94	Shirasawa	358	400	6/25/92
DN JH	GY	5	3	0	0	9	4	9		4/5/94	Rodriguez et al.	345	202	10/22/92

## FOREIGN PATENTS OR PUBLISHED FOREIGN PATENT APPLICATIONS

		DOCUMENT NUMBER								PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION	
														YES	NO
	GZ														
	HA														
	HB														

## OTHER DOCUMENTS (Including Author, Title, Date\*\*, Relevant Pages, Place of Publication\*\*\*)

HC	
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EXAMINER *Dustin Nguyen* 05/08/03  
*John Hanley*

DATE CONSIDERED

11/21/96

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Wise et al.FILING DATE  
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DN JH	HF	5	3	0	1	0	1	9	4/5/94	Citta	348	416	9/17/92
JH	HG	5	3	0	1	0	3	2	4/5/94	Hong et al.	358	261.2	12/4/92
JH	HH	5	3	0	1	0	4	0	4/5/94	Hoshi et al.	358	465	4/22/92
DN JH	HI	5	3	0	1	1	3	6	4/5/94	McMillan, Jr et al.	364	725	7/27/93
previously filed	HJ	5	3	0	+	2	4	2	4/5/94	Gonzales et al.	382	56	8/31/92
DN JH	HK	5	3	0	1	2	7	2	4/5/94	Atkins	395	165	11/25/92
JH	HL	5	3	0	3	3	4	2	4/12/94	Edge	395	164	12/22/92
JH	HM	5	3	0	4	9	5	3	4/19/94	Heim et al.	331	1A	6/1/93
JH	HN	5	3	0	5	4	3	8	4/19/94	MacKay et al.	395	164	5/19/92
JH	HO	5	3	0	9	5	2	7	5/3/94	Ohki	382	56	1/15/92
JH	HP	5	3	1	1	3	0	9	5/10/94	Ersoz et al.	348	409	5/30/91
DN JH	HQ	5	3	5	1	0	4	7	9/27/94	Behlen	341	67	9/21/92
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	HS												

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							YES	NO
	HT							
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	HV							

## OTHER DOCUMENTS (Including Author, Title, Date\*\*, Relevant Pages, Place of Publication\*\*\*)

HW	
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EXAMINER *Dushniguyer* 05/08/03  
*John Hough*

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ATTY. DOCKET NO.  
POOD P941004(EPIUSC1CIP)

SERIAL NO.  
081000-002

09/309239

APPLICANT  
Wise et al.

FILING DATE  
3/7/95

GROUP  
224 2303 2783

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EXAMINER INITIAL		PATENT NUMBER								ISSUE DATE	PATENTEE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
DD	JH	AA	3	9	6	2	6	8	5	6/76	Belle-Isle	340	172.5	
	JH	AB	4	1	4	9	2	4	2	4/79	Pirz	364	200	
	JH	AC	4	7	8	9	9	2	7	12/88	Hannah	364	200	
	JH	AD	4	8	2	3	2	0	1	4/18/89	Simon et al.	358	133	
	JH	AE	4	8	6	6	6	3	7	9/12/89	Gonzalez-Lopez et al	364	518	
	JH	AF	5	1	2	9	0	5	9	7/7/92	Hannah	395	166	
	JH	AG	5	2	8	9	2	7	6	2/22/94	Siracusa et al.	348	467	
	JH	AH	5	2	8	9	5	7	7	2/22/94	Gonzales et al.	395	163	
DD	JH	AI	5	3	0	1	2	4	2	4/5/94	Gonzales et al.	382	56	
		AJ												

FOREIGN PATENT OR PUBLISHED FOREIGN PATENT APPLICATION

		DOCUMENT NUMBER	PUBLICATION DATE	COUNTRY OR PATENT OFFICE	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	AK							
	AL							
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AN	Cheng, "A Data Flow Architecture For Digital Image Processing," Wescon Tech. Papers No. 4/6, 10/30/84, Anaheim, California, USA, pp. 1-10
AO	Komori et al., "An Elastic Pipeline Mechanism By Self-Timed Circuits," IEEE Journal Of Solid-State Circuits, Vol. 23, No. 1, 2/88, New York, NY, USA, pp. 111-117
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EXAMINER <i>Dushnigee</i>	05/08/03	DATE CONSIDERED <i>11/31/96</i>
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Wise et al.

<i>Notice of References Cited</i>			Application No. <del>881400,397</del>	Applicant(s)		
Examiner John Harrity			Group Art Unit <del>278-3</del>	Page 1 of 1		
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DN A	5,457,780	10/95	Shaw et al.	395	185	
DN B	5,421,028	5/95	Swanson	395	800	
DN C	5,122,948	6/92	Zapolin	364	131	
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FOREIGN PATENT DOCUMENTS						
*	DOCUMENT NO.	DATE	COUNTRY	NAME	CLASS	SUBCLASS
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T						
NON-PATENT DOCUMENTS						
*	DOCUMENT (Including Author, Title, Source, and Pertinent Pages)				DATE	
x U	Chong, "A Data Flow Architecture for Digital Image Processing," Wescon Tech. Paper No. 4/8, pp. 1-10.				10/30/84	
V						
W						
X	<i>Dushnugney</i>				<i>05/08/03</i>	